

Variable	Mean	SD	Min	Max
Age	34.5	10.2	18	65
Gender	0.5	0.5	0	1
Marital status	0.6	0.5	0	1
Education	12.5	1.5	9	16
Income	1500	500	500	3000
Health status	0.8	0.2	0	1
Smoking status	0.3	0.5	0	1
Alcohol consumption	0.2	0.4	0	1
Exercise frequency	0.5	0.5	0	1
Stress level	0.7	0.3	0	1
Sleep quality	0.6	0.4	0	1
Work satisfaction	0.5	0.5	0	1
Life satisfaction	0.6	0.4	0	1
Depression score	0.3	0.5	0	1
Anxiety score	0.2	0.4	0	1
Quality of life	0.7	0.3	0	1
Healthcare utilization	0.4	0.5	0	1
Health insurance status	0.9	0.1	0	1
Chronic disease status	0.1	0.3	0	1
Family size	2.5	1.0	1	5
Home ownership	0.7	0.4	0	1
Commute time	15	10	5	30
Neighborhood safety	0.8	0.2	0	1
Access to healthcare	0.9	0.1	0	1
Healthcare costs	100	50	50	200
Healthcare quality	0.8	0.2	0	1
Healthcare access	0.9	0.1	0	1
Healthcare utilization	0.4	0.5	0	1
Healthcare satisfaction	0.6	0.4	0	1
Healthcare costs	100	50	50	200
Healthcare quality	0.8	0.2	0	1
Healthcare access	0.9	0.1	0	1
Healthcare utilization	0.4	0.5	0	1
Healthcare satisfaction	0.6	0.4	0	1

5 a shell configured to be removably installed
over a portion of a gas cap;

a message-bearing element supported on the shell and configured to display a message formulated to influence the vehicle operator to take some action.

25 3. A gas cap cover device as defined in
claim 1 in which the message-bearing element
comprises any one or more elements selected from a
group of elements comprising decals, stickers,
paints, foils, laminates, inks, overlays or a
30 portion of the gas cap cover shell.

4. A gas cap cover device as defined in claim 1 in which the connector includes a handle

portion configured to fit over and engage a handle portion of the gas cap.

5. A gas cap cover device as defined in claim 1 in which the shell includes at least two retainer tabs extending integrally and radially inward from around a bottom edge of a circumferential sidewall portion of the shell, the tabs configured to flex upwardly as the cover device is pushed down over a gas cap and to snap back once they have been pushed passed a bottom edge of the gas cap.

6. A gas cap cover device as defined in claim 1 including a circumferential sidewall having a rolled-under profile configured to circumferentially distend as the cover device is pushed over a cap then to snap back as the sidewall is pushed past a lower edge of the cap.

7. A gas cap cover device as defined in claim 1 in which an upper surface of the cover device includes a hole configured to align with and leave uncovered a refueling receptacle in a gas cap to be covered.

8. A gas cap cover device as defined in claim 7 including an electromagnetic energy transmitter supported on the shell and configured to aid in directing a robotic fueling device.

9. A gas cap cover device as defined in claim 1 further including a receptacle configured to engage a wrench and to transmit turning forces

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from the wrench to the cap through the cover device.

10. A method for reducing emissions from 5 automotive vehicles; the method including the steps of:

providing an automotive vehicle having a fuel tank and a fuel tank fill tube in fluid communication with the fuel tank;

10 providing a replacement gas cap configured to close the fuel tank fill tube, the replacement gas cap including a good quality sealing surface capable of sealing the fuel tank fill tube against fuel vapor leakage;

15 providing a message-bearing element bearing a message worded to remind an automotive vehicle operator to accomplish a task related to vehicle emission reduction;

providing the message-bearing element on the 20 replacement gas cap;

removing any existing gas cap from the fuel tank fill tube; and

installing the replacement gas cap in a sealing relationship on the fuel tank fill tube.

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11. The method of claim 10 in which the step of providing a message-bearing element includes the step of providing a message recommending accomplishment of one or more tasks 30 selected from of a group of tasks including: replacing the gas cap, accomplishing vehicle maintenance, purchasing a product, purchasing a service, inspecting the vehicle for safety problems, and testing vehicle emission levels.

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12. The method of claim 10 in which the step of providing a message-bearing element includes the step of providing a gas cap cover device on the replacement gas cap, the cover device
5 bearing the message and including a shell configured to be disposed over a portion of a gas cap and a connector supported on the shell and configured to engage the gas cap and cause the gas cap to rotate when the cover device is rotated.

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13. The method of claim 10 in which the step of installing the gas cap is accomplished before the step of providing the message-bearing element.

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14. The method of claim 10 including the additional step of repeating the steps of claim 10 for each of a plurality of automotive vehicles as part of a gas cap exchange program.

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15. The method of claim 14 including the additional steps of:

estimating vehicle emission reduction due to replacement of leaking or missing gas caps; and

25 claiming a corresponding quantity of Mobile Emission Reduction Credits.

16. The method of claim 15 including the additional step of selling the Mobile Emission
30 Reduction Credits to a pollution point source to help fund the gas cap exchange program.

17. The method of claim 15 in which the step of estimating vehicle emission reduction

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includes the steps of:

testing old replaced gas caps to determine their individual fuel vapor leakage rates;

calculating the total projected tonnage of fuel vapor that leaking and missing caps would have released into the atmosphere had they not been replaced; and

calculating a total Mobile Emission Reduction Credit value by multiplying the projected tonnage of fuel vapor emissions by a predetermined present value of a single Mobile Emission Reduction Credit.

18. A method for advertising products and services to automotive vehicle operators; the method including the steps of:

providing an automotive vehicle having a fuel tank, a fuel tank fill tube in fluid communication with the fuel tank, and a gas cap configured to close and seal the fuel tank fill tube;

providing a message-bearing element on the gas cap, the message-bearing element configured to display an advertising message.

19. The method of claim 18 in which the step of providing a message-bearing element includes the step of providing a message on the message-bearing element that recommends accomplishment of one or more tasks selected from of a group of tasks including: replacing the gas cap, accomplishing vehicle maintenance, purchasing a product, purchasing a service, inspecting the vehicle for safety problems, and testing vehicle emission levels.

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20. The method of claim 18 in which the
step of providing a message-bearing element
includes the step of providing a gas cap cover
device comprising a shell configured to be disposed
5 over a portion of the gas cap, a connector
supported on the shell and configured to
rotationally engage the gas cap and cause the gas
cap to rotate when the cover device is rotated, the
message-bearing element being supported on the
10 cover device.

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